MULTIMEDIA **UNIVERSITY**

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FINAL EXAMINATION

TRIMESTER 1, 2018/2019

TIS2351/THI3461 – HUMAN-COMPUTER INTERACTION
(All sections / Groups)

22 October 2018
09:00 a.m. – 11:00 a.m.
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This question paper consists of 5 pages with 4 Sections only.

2. Attempt **ALL** questions in **SECTION A, SECTION B, SECTION C** and **SECTION D**. The distribution of the marks for each question is given.

3. Please write all your answers in the answer box associated with each question in this question paper.

Section A: Answer all questions.

Fill in each blank with ONE word that best describes the meaning of the sentence as a whole.

(10 marks)

Answer

Identifying relevant usability and user experience goals can lead to the design of 1) ___ interactive products. Usability is broken down into the following goals: 2) ___, efficiency, safety, utility, learnability and memorability. For instance, memorability refers to how easy a product is to 3) ___ how to use, once learned. This is especially important for interactive products that are used 4) ___. To be able to create engaging user experiences, designers also need to understand how 5) ___ work. A diversity of user experience goals has been articulated in interaction 6) ___, which cover a range of emotion and felt experiences. These include desirable and 7) ___ ones. Many of these are subjective qualities and are concerned with how a system feels to a 8) ___. They differ from the more objective usability goals because they are concerned with how users 9) ___ an interactive product from their perspective. Thus, designers need to know many different things about users, technologies and

1)

2)

3)

4)

5)

6)

7)

8)

9)

Continued...

10) ___ between them in order to create effective

10)

user experiences.

Section B: Answer all questions.

Indicate the ONE best answer for each question.

(10 marks)
Answer

1) Which of the following are four basic activities in interaction design?
   A. Establishing requirements, designing alternatives, prototyping and evaluating.
   B. Functional requirements, data requirements, usability goals, and user experience goals.
   C. Conceptual design, concrete design, prototyping and construction.
   D. Usability testing, experiments, field studies and cognitive walkthrough.

2) Which of the following are three principles for user-centered approach?
   A. Late focus on users and tasks, non-empirical measurement, iterative design.
   B. Early focus on users and tasks, non-empirical measurement, iterative design.
   C. Early focus on users and tasks, empirical measurement, iterative design.
   D. Late focus on users and tasks, non-empirical measurement, linear design.

3) Which of the following are cognitive processes?
   A. Attention and perception.
   B. Memory and instruction.
   C. Learning and manipulating.
   D. Problem solving and engaging.

4) Which of the following are interaction types?
   A. Challenging and engaging.
   B. Instructing and conversing.
   C. Exploring and prototyping.
   D. Manipulating and evaluating.

Continued...

5)   Who developed emotional design model?
        A. Ben Shneiderman.
        B. Donald Arthur Norman.
        C. Edwin Hutchins.
        D. Jenny Preece.

6)   Which among the following is NOT a core principle of direct manipulation?
        A. Continuous representation of the objects and actions of interest.
        B. Physical actions and button pressing instead of issuing commands with complex syntax.
        C. Rapid reversible incremental actions with immediate feedback about the object of interest.
        D. The propensity people have to attribute human qualities to animals and objects.

7)   Which among the following is NOT required in a co-presence setting?
        A. Awareness.
        B. Physical coordination.
        C. Remote conversations.
        D. Shareable interfaces.

8)   Who introduced the term awareness in social interaction?
        A. Harvey Sacks, Emanuel Schegloff and Gail Jefferson.
        B. Hiroshi Ishii, Minoru Kobayashi and Jonathan Grudin.
        C. Jenny Preece, Yvonne Rogers and Helen Sharp.
        D. Paul Dourish and Sara Bly.

9)   Which of the following support impact on the job of User Experience Designer in practice?
        A. AgileUX, design patterns, open source resources, and automated tools.
        B. Apple, Microsoft, Samsung and Huawei.
        C. Instructing, Conversing, Manipulating and Exploring.
        D. Paradigms, Theories, Models and Frameworks.

10)   Which among the following does NOT fit into AgileUX approach?
        A. Re-prioritization may happen as frequently as every two weeks, at the beginning of each iterative cycle.
        B. Requirements are specified only in enough detail for implementation to begin.
        C. Requirements are specified as completely as possible before any implementation begins.
        D. Requirements are elaborated as implementation proceeds.

Continued...

Section C: Answer all questions.

1. Describe THREE categories of user introduced by Ken Eason.

(3 marks)

Answer

2. Describe FOUR core components of a conceptual model in your own words.

(4 marks)

Answer

3. Give THREE design implications to support human attention.

(3 marks)

Answer

Continued...

Section D: Answer all questions.

1. Sacks, Schegloff and Jefferson (1978) introduced a simplest systematics of turn-taking for conversation. List out THREE basic rules and describe in your own words how these basic rules are applied.

(6 marks)

Answer

2. Justify why Lean UX can support the quick development of innovative products such as ubiquitous technologies.

(4 marks)

Answer

End of page